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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/709,511

05/11/2004

Argy Petros

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30448

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03/21/2008

AKERMAN SENTERFITT

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EXAMINER

WIMER, MICHAEL C

ART UNIT

PAPER NUMBER

2821

MAIL DATE

DELIVERY MODE

03/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/709,511	Applicant(s) PETROS, ARGY	
	Examiner Michael C. Wimer	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-14,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12,16 and 17 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-11,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The finality of the rejection of the last Office action is withdrawn in view of the newly discovered reference(s) to Butler et al. (7133810). Rejections based on the newly cited reference(s) follow.

Specification

2. The disclosure is objected to because of the following informalities: This electronic version of the specification has many typographical errors. See paragraph [0027]. The third sentence therein reads "Bck side 22 cis ompromisedof...andparallel metched etallic lstrips or ines 23...". There are many other typos in paragraphs [0027] through [0035]. Applicant's cooperation is requested in correcting any errors in these paragraphs. A new substitute specification may be a solution and following all rules for submission thereof.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1,2,4-10,13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. In Claim 1, last line, there is no proper antecedent basis for "the multifilar helix antenna" and thus there is confusion as to what defines the helix antenna in line 2 and the general recitation in the preamble, line 1. A multifilar antenna is not the same as a

mere helix antenna,, which may be a single radiating arm. Applicant must make the invention clear as to what structure is intended to be claimed here. In Claim 10, the alternative language "rings or loops" lacks a proper antecedent basis and it is uncertain if such structures are equivalent or some additional structure should be named. It is suggested to use one term unless there is additional structure named loops. Note Claim 10 is dependent from Claim 1 and not Claim 8, where a loop is recited.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1,4-8,11,13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. (7133810) in view of Filipovic et al. (6184844).

8. Regarding Claims 1, 4-8,11,13 and 14, Butler et al show in Fig. 44B, for example, an antenna structure comprising a helix antenna and two helical parasites, where the latter are deemed concentric metallic rings, particularly since they are positioned around the axis of the cylinder and extend partially along that axis, shared with the helix antenna. There appears to be no suggestion to provide a helix antenna etched on a flexible substrate. Thus, Filipovic et al. are cited as teaching a helix antenna etched on a flexible substrate. Given this known technique of forming helical antennas on a flexible substrate, the skilled artisan would have found it obvious and looked at Filipovic et al. for forming the helix antenna in Butler et al., particularly since the latter employ the helix on a cylinder (Figures 44B and 45B). Further regarding Claim 11, the method for reducing the helix antenna height is obtained by the structure defined in the art.

Allowable Subject Matter

9. Claims 2,9 and 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Claims 12,16 and 17 are allowed.

Response to Arguments

11. Applicant's arguments with respect to claims of record have been considered but are moot in view of the new ground(s) of rejection.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (571) 272-1833. The examiner can normally be reached on M-F.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCW
3/6/2008

/Michael C. Wimer/
Primary Examiner, Art Unit 2821